

A TULIP WITH A RUNNER

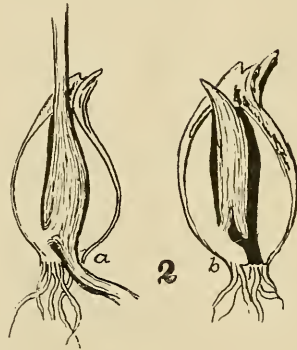
BY FREDERICK H. BLODGETT

A number of young tulip bulbs were planted in November, in a shallow box for indoor cultivation. On January 23, 1901, one of these plants was removed from the soil for examination. The leaf was several inches long, but still tightly rolled, as the plants were kept in a dark room.* From the bottom of the bulb a runner extended obliquely downward for two inches or more. The tip was broken in lifting the plant from the soil, so that it could not be examined. The appearance of the bulb is shown, natural size, at Fig. 1.

FIG. 1.



FIG. 2.



The bulb was cut open in the plane of the runner. In origin the runner was found to be quite similar to those of *Erythronium*. The base of the runner and that of the leaf stalk are continuous, and form a continuous core through the center of the bulb. By the side of this core there was another, much less developed. The leaf portion of this core was hardly differentiated from the

*This was part of the etiolation experiments by Dr. D. T. MacDougal, who kindly gave the specimen to the author.

common central mass, but the runner was easily recognized as a small bud projecting downward from the bottom of the core. In Fig. 2 the two cores are shown as they appeared in place within the bulb. The smaller core is hidden beneath the larger in the first figure (2, *a*).

The two cores were united to each other and to the bulb tissue by a common stem or stalk. The stalk of the smaller core was longer than the other, as is seen in the figure (2, *b*). This stalk, or point of union between bulb tissue and sprout or vegetative tissue is not at the point nearest to the root fibers as is the case in *Erythronium*, but is at a little distance from that point. The roots form a compact bundle of fibers at the bottom, rather than at one side of the base, of the bulb. But the runner issues in the two genera (*Erythronium* and *Tulipa*) from the bottom of the immature bulbs, when produced.

VARIETAL AND SPECIFIC NAMES

BY T. D. A. COCKERELL

I am very glad to see (Bull. Torr. Club, May, p. 300) that Dr. Robinson has frankly discussed the important question of the status of varietal names; it is a question which has been overlooked or evaded by many botanists, with the result that the existing nomenclature is often inconsistent.

I am by no means prepared to admit, of course, that what is good in zoölogy is not also good in botany; and there are certain considerations which Dr. Robinson has apparently overlooked.

Generic and subgeneric names are expressions of arbitrarily-formed groups which have justification simply in their convenience. From a Darwinian standpoint, these groups must contain species which are not less related to one another than to species assigned to other genera or subgenera. There is to be, in fact, a natural continuity or contiguity, as with the inches on a foot-rule. But granting this, it is then a matter of taste or custom how large such divisions may be made. The subgenera of one generation or one author are often the genera of the next.